

19



Europäisches Patentamt
European Patent Office
Office européen des brevets

11 Publication number:

**0 222 717
A3**

12

EUROPEAN PATENT APPLICATION

21 Application number: 86850348.3

51 Int. Cl.4: **A61L 27/00**, A61L 31/00

22 Date of filing: 13.10.86

30 Priority: 01.11.85 SE 8505158

43 Date of publication of application:
20.05.87 Bulletin 87/21

84 Designated Contracting States:
CH DE FR GB LI SE

86 Date of deferred publication of the search report:
07.01.88 Bulletin 88/01

71 Applicant: **The Institute for Applied
Biotechnology
Box 33053
S-400 33 Göteborg(SE)**

72 Inventor: **Branemark, Per-Ingvar
Ändergatan 3
S-431 39 Mölndal(SE)**
Inventor: **Erlandsson, Björn-Erik
Dr. Forselius gata 2
S-413 26 Göteborg(SE)**
Inventor: **Bjursten, Lars-Magnus
Linnegatan 9
S-413 04 Göteborg(SE)**
Inventor: **Kasemo, Bengt
Tjärkil 1400
S-644 00 Mellerud(SE)**

74 Representative: **Olsson, Gunnar
Nobel Corporate Services Patents and
Trademarks
S-691 84 Karlskoga(SE)**

54 **Implant material.**

57 A material of unalloyed titanium for implantation in
body tissue wherein the surface inorganic atomic
layer of the material contains

Ti 29 - 33

O 61 - 67

expressed in atomic per cent. In addition, the sur-
face layer may not include amounts of other atoms
about certain maximums. By using in living tissue it
has been found that such a surface composition has
given particularly positive tissue reactions.

EP 0 222 717 A3



European Patent
Office

EUROPEAN SEARCH REPORT

Application number

EP 86 85 0348

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.4)
X	CHEMICAL ABSTRACTS, vol. 103, no. 22, 2nd December 1985, page 362, abstract no. 183600h, Columbus, Ohio, US; & JP-A-60 92 761 (KYOCERA CORP.) 24-05-1985 * Whole abstract * ---	1	A 61 L 27/00 A 61 L 31/00
X	FR-A-2 383 656 (CERAVER) * Claim 1 * ---	1	
X	DE-A-2 313 678 (H. BECKER) * Claims 1,4 * ---	1	
X	FR-A-2 282 852 (J. MASNOU) * Claims 1,8 * ---	1	
A	FR-A-2 318 617 (SUMITOMO) * Claims 1,6,7 * -----	1	TECHNICAL FIELDS SEARCHED (Int. Cl.4) A 61 L
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 12-10-1987	Examiner PELTRE CHR.
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	